

**Amendments to the Drawings:**

The attached sheet of drawings include changes to Figure 2. This sheet replaces the original drawing of Fig. 2. A replacement sheet and an annotated sheet showing changes are in the Appendix at the end of this paper.

## **REMARKS/ARGUMENTS**

Claims 1 – 9 are presented for reconsideration and further examination in view of the foregoing amendments and following remarks.

In the outstanding Office Action, the Examiner rejected claims 1 and 5 – 9 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,585,723 to Simor (hereinafter referred to as “the Simor ‘723 patent”); and rejected claims 2 – 4 under 35 U.S.C. §103(a) as being unpatentable over the Simor ‘723 patent in view of U.S. Patent No. 6,186,790 to Karmaker et al. (hereinafter referred to as “the Karmaker et al. ‘790 patent”).

By this Response and Amendment, claim 1 has been amended to recite “*...a bend axis in at least one of said depending side surfaces*, wherein at least a part of the depending side surfaces has an inwardly directed bottom portion *directed inwardly from said bend axis*” and, as amended, the rejections to claim 1 and the rejections to the claims dependent thereon are traversed.

Support for the amendment to claim 1 can be found on page 3, lines 15 – 22 of the originally filed application and in originally filed figures 1 and 2. Therefore, it is respectfully submitted that the above amendments do not introduce any new matter, within the meaning of 35 U.S.C. §132, to this application.

### **Rejection Under 35 U.S.C. §102(b)**

The Examiner rejected claims 1 and 5 – 9 as being anticipated by the Simor ‘723 patent.

### Response

By this Response and Amendment, independent claim 1 has been amended and, as amended, the rejections thereto are traversed since all of the features of amended independent claim 1 are not present in the cited prior art.

For a reference to anticipate an invention, all of the elements of that invention must be present in the reference. The test for anticipation under section 102 is whether each and every element as set forth in the claim is found, either expressly or inherently, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); MPEP §2131.

Amended independent claim 1 recites: “[a] dental crown formed of a thermoplastic polymer material, said crown having a natural appearance of a vital tooth and comprising a tooth shaped top surface and depending flexible side surfaces extending continuously around edges of said tooth shaped top surface and extending continuously from a tooth shaped top surface end of the dental crown to an end opposite said tooth shaped top surface end of the dental crown, a bend axis in at least one of said depending side surfaces, wherein at least a part of the depending side surfaces has an inwardly directed bottom portion directed inwardly from said bend axis.”

The Simor ‘723 patent discloses a dental crown including an occlusal surface and a sidewall that tapers in cross section toward a restricted opening at the cervix. From the figures of the Simor ‘723 patent, it appears that the wall begins tapering at the top portion of the tooth.

In contrast to the presently claimed invention, the crown disclosed in the Simor ‘723 patent does not disclose, teach or suggest a crown comprising “[a] crown... comprising..., a bend axis in at least one of said depending side surfaces, wherein at least a part of the depending side surfaces has

an inwardly directed bottom portion directed inwardly from said bend axis” as recited in claim 1. The Simor ‘723 patent discloses a flexible side surface; however, the Simor ‘723 patent is silent with respect to where the side surface bends. At the very most, the figures show that the side surface bends at its connection to the occlusal surface. Notwithstanding this, however, the Simor ‘723 patent does not disclose, teach or suggest a “bend axis” as recited in amended independent claim 1. The bend provided in the crown of the presently claimed invention reduces the stress on the connection between the depending side surface and the tooth shaped top surface, thereby preventing potential fracture. The Simor ‘723 patent does not have such a benefit. Thus, the Simor ‘723 patent does not anticipate the presently claimed invention.

Similarly, claims 5 – 9 are asserted to be patentable over the cited prior art for at least the reason that they depend from claim 1 and therefore contain the same features as claim 1.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection under 35 U.S.C. §102(b).

#### **Rejection Under 35 U.S.C. §103(a)**

The Examiner rejected claims 2 – 4 under 35 U.S.C. §103(a) as being unpatentable over the Simor ‘723 patent in view of the Karmaker et al. ‘790 patent.

#### **Response**

The arguments above with respect to the Simor ‘723 patent are incorporated by reference. By this Response and Amendment, independent claim 1 has been amended and, as amended, Applicant respectfully traverses the Examiner’s rejection since all of the features of

amended independent claim 1, from which claims 2 – 4 depend, are neither disclosed, taught, nor suggested by the cited prior art.

To establish a *prima facie* case of obviousness, the Examiner must establish that the prior art references teach or suggest all of the claim limitations. *Amgen, Inc. v. Chugai Pharm. Co.*, 18 USPQ2d 1016, 1023 (Fed. Cir. 1991); *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 USPQ 494, 496 (CCPA 1970).

The Karmaker et al. '790 patent does not cure the deficiencies of the Simor '723 patent. The Karmaker et al. '790 patent discloses structural components for dental appliances that are comprised of a polymeric matrix and further discloses that uses for the structural components include crowns. In contrast to the presently claimed invention, however, the cited prior art combination does not disclose, teach or suggest “[a] crown... comprising..., a bend axis in at least one of said depending side surfaces, wherein at least a part of the depending side surfaces has an inwardly directed bottom portion directed inwardly from said bend axis” as recited in claim 1. As this feature is not disclosed, taught or suggested by the cited prior art combination, the cited prior art combination does not render claim 1, or the claims dependent thereon, obvious.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the outstanding rejections.

## CONCLUSION

In light of the foregoing, Applicant submits that the application is now in condition for allowance. If the Examiner believes the application is not in condition for allowance, Applicant respectfully requests that the Examiner contact the undersigned attorney if it is believed that such

Appl. No. 10/685,803  
Reply to final Office Action of February 23, 2006  
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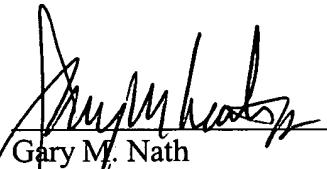
contact will expedite the prosecution of the application.

In the event this paper is not timely filed, Applicant petitions for an appropriate extension of time. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 14-0112.

Respectfully submitted,

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## APPENDIX



FIG. 1

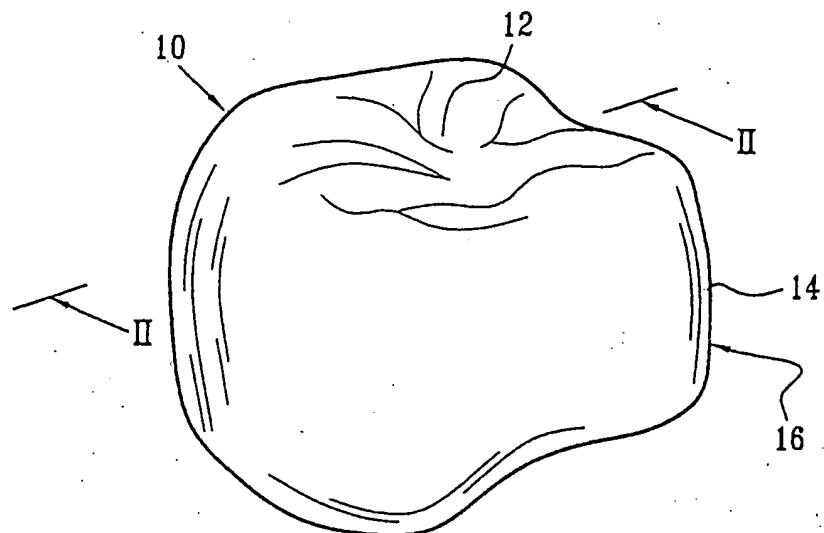


FIG. 2

